COMMISSIONS 27 AND 42 OF THE IAU
INFORMATION BULLETIN ON VARIABLE STARS
Number 4397

Konkoly Observatory
Budapest
20 November 1996

*HU ISSN 0374 – 0676*

# PHOTOELECTRIC $BVR_C$ OBSERVATIONS FOR THE NEW CEPHEID VARIABLE STAR GSC 3596.0433

Recently Antipin (1996) has analysed photographic archival plates at Sternberg Astronomical Institute of Moscow and found that the star GSC 3596.0433 is a Cepheid variable with the elements:

$$\text{Max JD}_{hel} = 2447450.22 + 2.41827 \times \text{E}$$

We observed this Cepheid photoelectrically at Mt. Maidanak observatory in August 1996 using the 60-cm reflector; a total of 39 $BVR_c$ measurements were obtained (Table 1), the accuracy of the individual data is near $\pm 0^m.01$ in $V$ and near $\pm$ 0$^m$.02 in $B-V$ and $V-R_c$. Above elements are used in Figure 1 for plotting our observations. According to our data, the amplitude of the light curve is 0$^m$.57 in $V$, 0$^m$.25 in $B-V$ and 0$^m$.13 in $V-R_c$.

The research described here was made possible in part by grants No. 95–02–05276 and No. 94–02–04347 from the Russian Foundation of Basic Research.

Table 1

| $JD_{hel}$ 2450300+ | $V$ | $B-V$ | $V-R_c$ | $JD_{hel}$ 2450300+ | $V$ | $B-V$ | $V-R_c$ |
|---|---|---|---|---|---|---|---|
| 11.3125 | 11.894 | 1.525 | 0.938 | 20.4433 | 12.168 | 1.550 | 0.952 |
| 11.3541 | 11.909 | 1.495 | 0.922 | 21.1616 | 11.985 | 1.498 | 0.939 |
| 12.2279 | 12.282 | 1.685 | 1.004 | 21.2458 | 12.032 | 1.558 | 0.941 |
| 12.2941 | 12.280 | 1.699 | 0.983 | 21.3020 | 12.039 | 1.583 | 0.929 |
| 13.1827 | 12.151 | 1.572 | 0.955 | 21.3478 | 12.060 | 1.561 | 0.952 |
| 13.2858 | 12.007 | 1.528 | 0.915 | 21.4882 | 12.137 | 1.599 | 0.964 |
| 14.1664 | 12.102 | 1.631 | 0.974 | 22.1558 | 12.313 | 1.669 | 0.997 |
| 14.3116 | 12.151 | 1.629 | 1.009 | 22.1956 | 12.321 | 1.672 | 1.008 |
| 15.1712 | 12.343 | 1.691 | - | 22.2341 | 12.351 | 1.716 | 1.006 |
| 15.3374 | 12.327 | 1.713 | 1.018 | 22.2974 | 12.340 | 1.730 | 0.999 |
| 16.1656 | 11.893 | 1.528 | 0.878 | 22.3488 | 12.351 | 1.678 | 0.987 |
| 16.2731 | 11.974 | 1.543 | 0.916 | 22.4821 | 12.371 | - | 1.019 |
| 18.2924 | 11.861 | 1.501 | 0.854 | 23.1587 | 11.822 | 1.497 | 0.874 |
| 19.1749 | 12.170 | 1.629 | 0.974 | 23.3018 | 11.834 | 1.470 | 0.896 |
| 19.3500 | 12.202 | 1.631 | 0.984 | 23.4410 | 11.911 | 1.556 | 0.909 |
| 20.1698 | 12.337 | 1.740 | 1.000 | 24.1714 | 12.235 | 1.663 | 0.996 |
| 20.2141 | 12.328 | - | 0.988 | 24.3991 | 12.278 | 1.657 | 1.005 |
| 20.2659 | 12.326 | 1.693 | 0.979 | 25.1763 | 12.238 | 1.575 | 0.972 |
| 20.3059 | 12.273 | 1.620 | 0.956 | 25.3291 | 12.083 | 1.550 | 0.943 |
| 20.3479 | 12.232 | 1.629 | 0.946 | | | | |

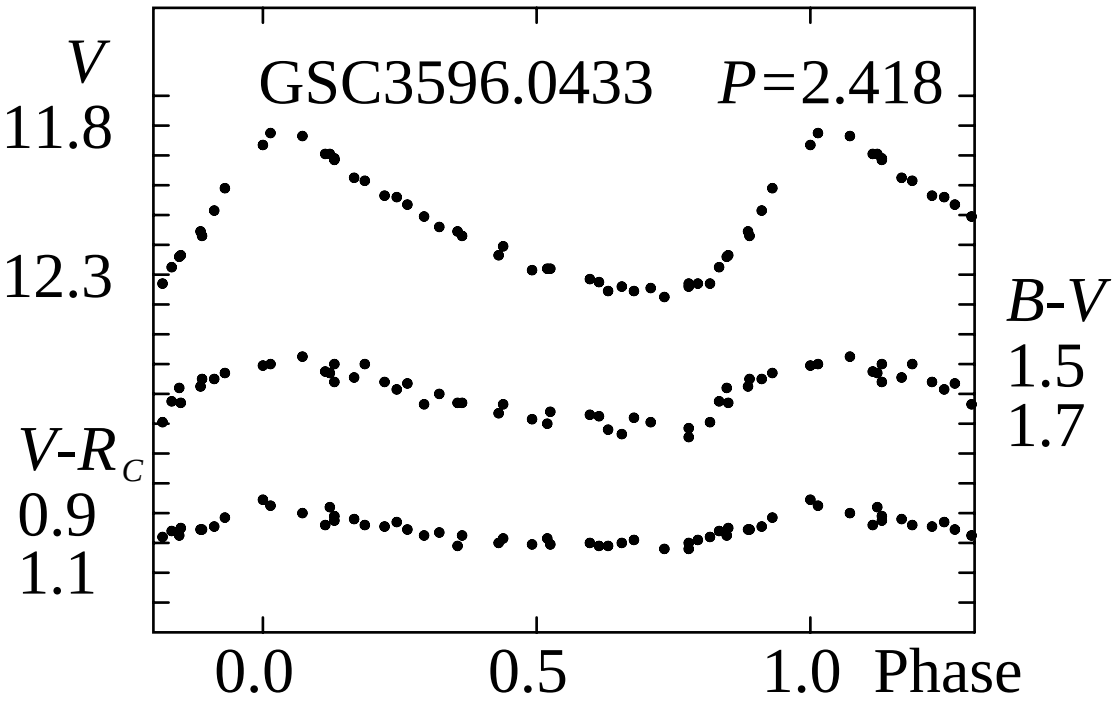


Figure 1

L. N. BERDNIKOV
O. V. VOZYAKOVA
Sternberg Astronomical Institute
13, Universitetskij prosp.
Moscow 119899, Russia

V. V. IGNATOVA
Astronomical Institute
33, Astronomicheskaya ul.
Tashkent 520000, Uzbekistan

Reference:
Antipin, S.V., 1996, Peremennye Zvezdy (in press)